File | O.T.A.C

August 25, 1954

A STUDY OF THE OPERATIONS OF THE BARTON BRANCH, SR, OCD APRIL 15 TO AUGUST 1, 1954

A. BACKGROUND

1. This study is based upon monitoring data received from two sources only - the FCC and IFRB. The FCC data partially covers the period January 1953 through July 1954. The IFRB data was taken from the first publication (Book 1) of the "Summary of Monitoring Information Received by the IFRB" for the period April through July 1953.

2. Although some 50,000 monitoring slips (Form 950) have been received from FCC, only 11,754 were coded and IBM carded in time for this study. FCC data included herein was obtained from machine analyses of these cards. All of the entries in IFRB Book 1 were punched in IBM cards (17,629) and were analysed for this study.

3. A comparison of the type of data IBM carded from the two sources may be of interest.

FCC CARDS	IFRB
Frequency	Frequency
Type of Call (If other than from call block)	Call (or name if BC)
Call	Frequency Deviation
City, Country	Class
Station Worked	Emission
Emission	Remarks (Emission Amplification)
Emission Amplification	Area of Reception (Monitor Area)
Class	Time Period of Observation
Service (Military, etc.)	QSA
Monitor Station	Total number of Observations
Time of Observation	
QSA	
Name of Organization	
Remarks(of Monitor Operator)	

4. It should be noted that whereas each FCC card represents a single observation, a single IFRB card may represent from one to several score observations. By reference to IFRB Book 1 it is observed that the column "Period of Day" shows the number of observations in each 2 hour time period by monitor areas. (Asterisks mean more than 10 and were assigned an arbitrary value of 15 when crossfooting to obtain the total number of observations) Thus the 17,629 cards analysed represent a total of 20D,000 observations, approximately.

B. DESCRIPTION OF DATA

1. Since this study is mainly statistical in nature - to furnish facts and figures upon which decisions may be reached concerning the adequacy of the Barton File - the data will be presented in the form of various tables and charts.

2. In order to show where the Barton File information is coming from, TABLE I lists all station locations from which reports have been received. (IFRB stations are listed according to monitor areas as delineated on Chart 2.) CHART 1 shows these stations as RED, BLUE, and GREEN circles plotted on a base map of the world.

3. TABLE II is presented to compare the activity of IFRB monitors. This data is listed by total number of reports submitted, and percent of grand total, for each IFRB monitor area. (The number of reports submitted by each IFRB station as listed in TABLE I is not available.) CHART 2 shows the percentage figures by monitor areas on a world base map. FCC data appears in this analyses as represented by the figures for Area 1.

4. To discover the adequacy of world coverage, TABLE III shows total reports, and percent of grand total, from FCC and IFRB stations, on the countries of the world. The countries are listed in their appropriate geographic area. This data was obtained by sorting and totalling the number of reports by call sign block assignments. The percentage figures are shown on the world area coverage map labelled CHART 3.

5. An attempt was made to demonstrate the quality of reports received by studying spectrum coverage. A tabulation is unnecessary for this data. The figures show that 97.8 of the frequencies reported to FCC and 98.5 of those reported to IFRB were in the HF (3-30 MC) band. 2% of the FCC and 1.5% of the IFRB reports were in the MF (300-3000 KC) band. 0.1% of the FCC reports were in the LF (30-300 KC) band and 0.1% in the VHF (30-300 MC) band. IFRB summaries contain information on frequencies between 2850 and 27,500 only.

6. Another qualitative type of study is presented in TABLE IV. Data here shows the percent of total FCC reports, by area, that gave city location information.

7. TABLE V is an analysis of the monitor station location information presented in TABLE I and on CHART 1. This data shows the number of stations by area and lists blank or sparsely covered areas.

8. TABLE VI is a list of monitor station locations from which information could possibly be obtained. These locations are designated as "Possible locations" and colored YELLOW on CHART 1. The operating organization appears on the chart following the location.